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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/170,225 10/13/98 SAWA

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EXAMINER

PM82/0424

SUGHRUE, MION, ZINN,
MACPEAK & SEAS, PLLC
2100 PENNSYLVANIA AVENUE , N.W.
WASHINGTON, DC 20037-3202

MCALLISTER, S

ART UNIT

PAPER NUMBER

2167

DATE MAILED:

04/24/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/170,225

Applicant(s)

Sawa et al

Examiner

Steven B. McAllister

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Feb 8, 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☒ The proposed drawing correction filed on Feb 8, 2001 is: a) ☒ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other:

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DETAILED ACTION

Drawings

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 2/8/01 have been approved.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1 and 5 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 1 and 5 appears to recite a belt with an elastic layer that varies in hardness, either over time or space, and a projecting amount that varies with the varying hardness in the belt (cl.1, line 5; cl. 5, line 7). Such a belt is not disclosed in the specification. One of ordinary skill in the art would not be able to make such a belt without undue experimentation.

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4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 5 and claim 5, line 7, "where the projecting amount increases with the elasticity of ... elastic material" is unclear.

In claim 2, line 1 and claim 6, line 5 are unclear. The text was interpreted to mean "10 to 70 percent by weight of high hardness particles, said high hardness particles having a particle diameter ...".

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Frandsen.

Frandsen shows a belt with high hardness particles 36 projecting from the surface of an elastic material comprising (see Fig. 3). It is inherent that under various load conditions (caused for instance by conveyed materials of different shapes or hardnesses) the particles will project various

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amounts due to the resiliency of the rubber because the greater pressures will cause a greater load on the individual particles.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold in view of Saylor, Jr.

Arnold shows a belt with an elastic base material layer 86, the layer having a hardness of between 15 and 90 (col. 10, lines 10-20) and a second layer 82. It does not show a particle containing layer, the layer 10-70% of its weight composed of 3-300 micrometer particles. Saylor, Jr. shows a layer 16 with 3-300 micrometer sized particles (col. 3, lines 57-61) and comprising 10-70% of the weight of the layer (col. 3, line 40 - col. 4, line 30). It would have been obvious to one of ordinary skill in the art to modify the second elastic layer 82 of Arnold by adding the particles as taught by Saylor, Jr. in order to provide enhanced friction on the load surface of the belt. It is inherent that under various load conditions (caused for instance by conveyed materials of different shapes or hardnesses) the particles will project various amounts

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due to the resiliency of the rubber because the greater pressures will cause a greater load on the individual particles.

As to claims 3 and 7, it is noted that Arnold discloses a filament in the central portion of the belt (see Fig. 8B).

As to claims 4 and 8, Arnold in view of Saylor, Jr. disclose all elements of the claim except the filament disposed on the driving surface. However, it would have been an obvious matter of design choice to place the filament on the driving surface side since it does not appear that the specific placement solves any specific problem or is for any particular reason and it appears that the belt would perform equally well with the filaments located in either location.

As to claim 9, it is noted that the hardness of the second material is less than the hardness of the first.

Response to Arguments

10. Applicant's arguments with respect to the 102 rejection have been considered but are moot in view of the new ground(s) of rejection.

11. Applicant's arguments filed 2/8/01 have been fully considered but they are not persuasive.

In response to applicant's argument that Saylor, Jr is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. *In re Oetiker*, 977 F.2d 1443, 24

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USPQ2d 1443, 1445 (Fed. Cir. 1992). In this case, Saylor, Jr. is concerned with providing a slip-resistant surface, as is applicant.

Further, applicant argues that Saylor does not teach particles dispersed throughout the layer because it shows a monolayer. However, the particles of Saylor are dispersed throughout the layer. The layer is simply a thin one. No specific layer thickness is claimed.

It is noted that applicant pursues the same arguments for claims 6-8 as were proposed for claim 5. However, the claim language is different for claims 6-8 in that it does not recite particles "dispersed throughout" the elastic layer.

Conclusion


12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,


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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. McAllister whose telephone number is (703) 308-7052.


Steven B. McAllister

April 19, 2001


ROBERT P. OLSZEWSKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3000 2100